

CDFA Treatment Program for Gypsy Moth (GM)

A gypsy moth infestation has been detected in host plants in the community of Ojai. Gypsy moth caterpillars feed on hundreds of kinds of plants and are capable of defoliating trees at an alarming rate. A single gypsy moth caterpillar can eat up to one square foot of leaves per day. In the northeastern U.S., where this pest arrived from Europe in the late 1800s, millions of these caterpillars emerge each spring, devouring large swaths of forest and foliage. When trees are repeatedly defoliated, they are rendered more susceptible to other pests and diseases, possibly leading to tree death and an increased potential for fire and erosion. A quarantine has been established and urgent treatment is now necessary to protect California from the negative economic and environmental impacts that the establishment of this pest would cause throughout California. California has a strong track record with this pest, having eradicated 28 isolated infestations. The Ojai infestation is a new introduction.

What Is At Risk In Ojai?

It is important to detect and eradicate gypsy moth infestations while the population is still small. There is a brief window of time to target the gypsy moth while it is in caterpillar stage in the spring. If a larger infestation were to develop in Ojai, the gypsy moth caterpillars would threaten oaks in this region as well as other hardwoods, evergreens, manzanita, cottonwood, willow and others. It is also a threat to forests and agricultural crops, such as fruit trees. The California Department of Food and Agriculture (CDFA) and your county agricultural commissioner's office are charged with monitoring and responding to infestations.

Treatment Information

CDFA will begin a treatment program against the gypsy moth beginning the week of March 9, 2009. Limited ground treatments with a naturally-occurring organic soil bacterium called *Bacillus thuringiensis kurstaki* (Btk) will be applied to the leaf surfaces of host trees and shrubs. Btk is used by certified organic growers and arborists for insect control on vegetable, orchard and farm crops, forests, ornamental trees, urban parks and landscaping. Btk affects only leaf-eating caterpillars; it has no effect on adult insects.

Foliar treatments are applied from the ground with a handheld hose attached to a truck-mounted tank. The foliage of all host trees and plants within a 400-meter radius of each detection site are treated. For more information on Btk, please see enclosed Q&A.

Protecting Beneficial Insects

No effects to either bees or Monarch butterflies has ever been observed as a result of gypsy moth eradication using Btk. CDFA has eradicated many small infestations of gypsy moth such as the Ojai program over the past 30 years without environmental impacts.

- Monarch adults, even if exposed to Btk, are not expected to be affected because Btk is known to be active only against the caterpillar stage of butterflies and moths. Additionally, there will be few, if any, Monarch adults in the Ojai treatment area during the time of treatment because they have left or were never there to begin with.

- The food plants of Monarch caterpillars will not be sprayed because they are not hosts for gypsy moth. Monarch caterpillars feed only on the perennial herbaceous plants commonly called milkweeds, which die back during the winter, and milkweeds are not known to be fed upon by gypsy moth caterpillars.

- Honey bees are not expected to be significantly affected by Btk because they have not been shown to be susceptible. Btk at the anticipated application dosage exhibits little or no effect on honey bees. This is reflected in the fact that, unlike for many other insecticides, there are no label restrictions on the use of Btk around honey bees.

What You Can Do To Help:

- Have gates unlocked in advance, if possible.
- Secure any pets and protect their food and water dishes. Put your pets temporarily indoors, if possible.
- Remove any laundry you may have left outside.
- Close your doors and windows during treatment. You may re-open them once treatment is completed.
- Move any barbecues, lawn furniture, toys and other miscellaneous items away from your trees and shrubs.



GM Eggs



GM Larvae



GM Larva



GM Adult



GM Adult

Photos from Forestry Images.com

Please call 800-491-1899 if you have questions about the program.